CLAIMS

1. A method for controlling power supplied from an AC power supply to an ohmic load, the AC power supply providing a sinusoidal output, the method comprising:

connecting the load to the AC power supply during a part of each period of the sinusoidal output, wherein the power supplied from the AC power supply to the load is varied by varying the duration of said part of each period,

wherein the sinusoidal output is rectified and the rectified output is delivered to a series connection of a first inductor and the load,

wherein the load is connected to and disconnected from the AC power supply at a frequency which is at least 500 times higher than the frequency of the AC power supply, and

wherein the power supplied from the AC power supply to the load is varied by varying a time ratio of connecting/disconnecting the load.

2. The method according to claim 1, wherein the time ratio of connecting/disconnecting the load is varied according to a variable duty cycle of a control signal applied to a switch coupled with the load.

3. The method according to claim 2, wherein the frequency of the control signal is in the range of 50kHz up to 250 kHz.

4. An apparatus for controlling power supplied from an AC power supply to an ohmic load, the apparatus comprising:

a switch for connecting the load to the AC power supply;

a controller for providing a control signal to the switch; and

a rectifier bridge having an input and an output, the input being adapted for connection to the AC power supply and the output being connected to a series connection of a first inductor, the load and the switch,

wherein the controller provides a control signal with a frequency which is at least 500 times higher than the frequency of the AC power supply,

wherein the switch is switched on and off by said control signal, and

wherein the controller comprises a control element for varying the duty cycle of the control signal.

5. The apparatus according to claim 4, further comprising:

a freewheeling element connected parallel to the series connection of the first inductor and the load.

6. The apparatus according to claim 4, further comprising:

a second inductor series connected to the input of the rectifier bridge.

7. The apparatus according to claim 4, further comprising:

a freewheeling element connected parallel to the output of the rectifier bridge.

8. The apparatus according to claim 4, wherein the frequency of the control signal is in the range of 50 kHz up to 250 kHz.

9. The apparatus according to claim 5, wherein the freewheeling element is a diode.

10. The apparatus according to claim 5, further comprising:

a second inductor series connected to the input of the rectifier bridge.

11. The apparatus according to claim 10, further comprising:

a second freewheeling element connected parallel to the output of the rectifier bridge.

12. The apparatus according to claim 11, wherein the second freewheeling element is a capacitor.

13. The apparatus according to claim 4, wherein the rectifier bridge includes:

first and second diodes connected in series each other and coupled with the series connection of the first conductor, the load and the switch; and

third and fourth diodes connected in series each other and in parallel with the first and second diodes.